7. (Amended) Antibody according to claim 6, wherein it is a polyclonal antibody of animal origin, preferably a mouse immunoglobulin.

8. (Amended) Antibody according to claim 6, wherein it is a monoclonal antibody.

9. (Amended) Antibody according to claim 8, wherein it is a monoclonal antibody produced by a hybridoma deposited in the CNCM of the Institut Pasteur under the registration number I-2411.

10. (Amended) Antigen according to claim 5, wherein said antigen is a protein of 200 kD which reacts with a specific monoclonal antibody directed against a bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacterium, said antibody being produced by a hybridoma deposited in the CNCM of the Institut Pasteur under the registration number I-2411.

11. (Amended) Method for the *in vitro* diagnosis of diseases associated with infections caused by the bacterium *Tropheryma whippelii*, comprising bringing serum or any other biological fluid of a patient into contact with the bacterium of claim 1.

12. (Amended) Method for *in vitro* diagnosis of the disease associated with infections caused by *Tropheryma whippelii* bacteria, comprising bringing serum or any other biological fluid of a patient into contact with the antibody of claim 6.

13. (Amended) Method for the *in vitro* serological diagnosis of Whipple's disease, comprising the steps which consist essentially of detecting an immunological reaction between an antibody according to claim 6 and an antigen of a bacterium *Tropheryma whippelii* responsible for Whipple's disease.

14. (Amended) Method for the *in vitro* serological diagnosis of Whipple's disease, comprising the step which consists essentially of detecting an immunological reaction between a human immunoglobulin which recognizes bacterium *Tropheryma whippelii* responsible for Whipple's disease and an antibody specific for said human immunoglobulin.

15. (Amended) Method of serological diagnosis according to claim 14 comprising the following steps:

- depositing a solution containing a bacterium *Tropheryma whippelii* responsible for Whipple's disease, in or on a solid support;
- introducing the test serum or biological fluid into or onto said support;
- introducing a solution of a labeled antibody specific for a human immunoglobulin which recognizes said bacterium, into or onto the support;
- observing an incubation period;

- rinsing the solid support; and
- detecting said immunological reaction.

16. (Amended) Kit for the *in vitro* detection of Whipple's disease by the method of claim 13, essentially comprising the following components:

- a solution containing a bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacterium; and/or
- a solution containing at least one specific antibody directed against a bacterium *Tropheryma whippelii* responsible for Whipple's disease or against an antigen of said bacterium; and/or
- a solution containing at least one antibody specific for a human immunoglobulin, which recognizes a bacterium *Tropheryma whippelii* responsible for Whipple's disease.

18. (Amended) Fragment of the *rpoB* gene of the bacterium *Tropheryma whippelii* according to claim 1, wherein said fragment comprises the nucleotide sequence SEQ ID NO: 3.

19. (Amended) Oligonucleotide comprising a sequence specific for the *rpoB* gene of the bacterium *Tropheryma whippelii* according to claim 1, said specific sequence comprising at least 12 consecutive nucleotide units included in the sequence SEQ ID NO: 3.

20. (Amended) Single-stranded oligonucleotide according to claim 19 selected from oligonucleotides having a sequence of at least 12 consecutive nucleotide units included in one of the sequences of SEQ ID NOs: 4 and 5, and from the oligonucleotides complementary to these oligonucleotides.

21. (Amended) Oligonucleotide according to claim 19, wherein it consists of the sequences SEQ ID NOs: 4 and 5.

22. (Amended) Probe for detecting *Tropheryma whippelii* bacteria in a biological sample, wherein said probe comprises a sequence according to claim 18.

23. (Amended) Process for determining the presence or absence of a *Tropheryma whippelii* bacterium in a sample which contains or may contain nucleic acids of at least one such bacterium, wherein said sample is brought into contact with at least one probe according to claim 22 and the formation or absence of formation of a hybridization complex between said probe and the nucleic acid of the sample is then determined.

24. (Amended) Nucleotide primer which can be used for synthesizing the *rpoB* gene of *Tropheryma whippelii* in the presence of a polymerase, wherein said primer comprises an oligonucleotide according to claim 19.

Please add new claims 25-28 as follows:

--25. Method for *in vitro* diagnosis of the disease associated with infections caused by *Tropheryma whippelii* bacteria, comprising bringing serum or any other biological fluid of a patient into contact with the antigen of claim 4. --

--26. Kit for the *in vitro* detection of Whipple's disease by the method of claim 14, essentially comprising the following components:

- a solution containing a bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacteria; and/or
- a solution containing at least one specific antibody directed against a bacterium *Tropheryma whippelii* responsible for Whipple's disease or against an antigen of said bacteria; and/or
- a solution containing at least one antibody specific for a human immunoglobulin, said human immunoglobulin recognizes a bacterium *Tropheryma whippelii* responsible for Whipple's disease. --

--27. Probe for detecting *Tropheryma whippelii* bacteria in a biological sample, wherein said probe comprises an oligonucleotide according to claim 19. --

--28.. Process for determining the presence or absence of a *Tropheryma whippelii* bacterium in a sample which contains or may contain nucleic acids of at least one such bacterium, wherein said sample is brought into contact with at least one probe according to claim 27 and the formation or absence of formation of a hybridization complex between said probe and the nucleic acid of the sample is then determined. --